



February 16, 2018

Mr. Brent Mishler  
4845 SE 60th Street  
Galena, Kansas 66739

RE: Analytical results for soil samples collected from former rail line on Mishler Property (Parcel #011-196-13-0-00-00-016.00-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. Mishler:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from two test pits excavated on your property (Test Pit Locations 35 and 36). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from both test pits at depths up to 24 inches below ground surface (bgs). Zinc also exceeded the cleanup level in all three samples submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

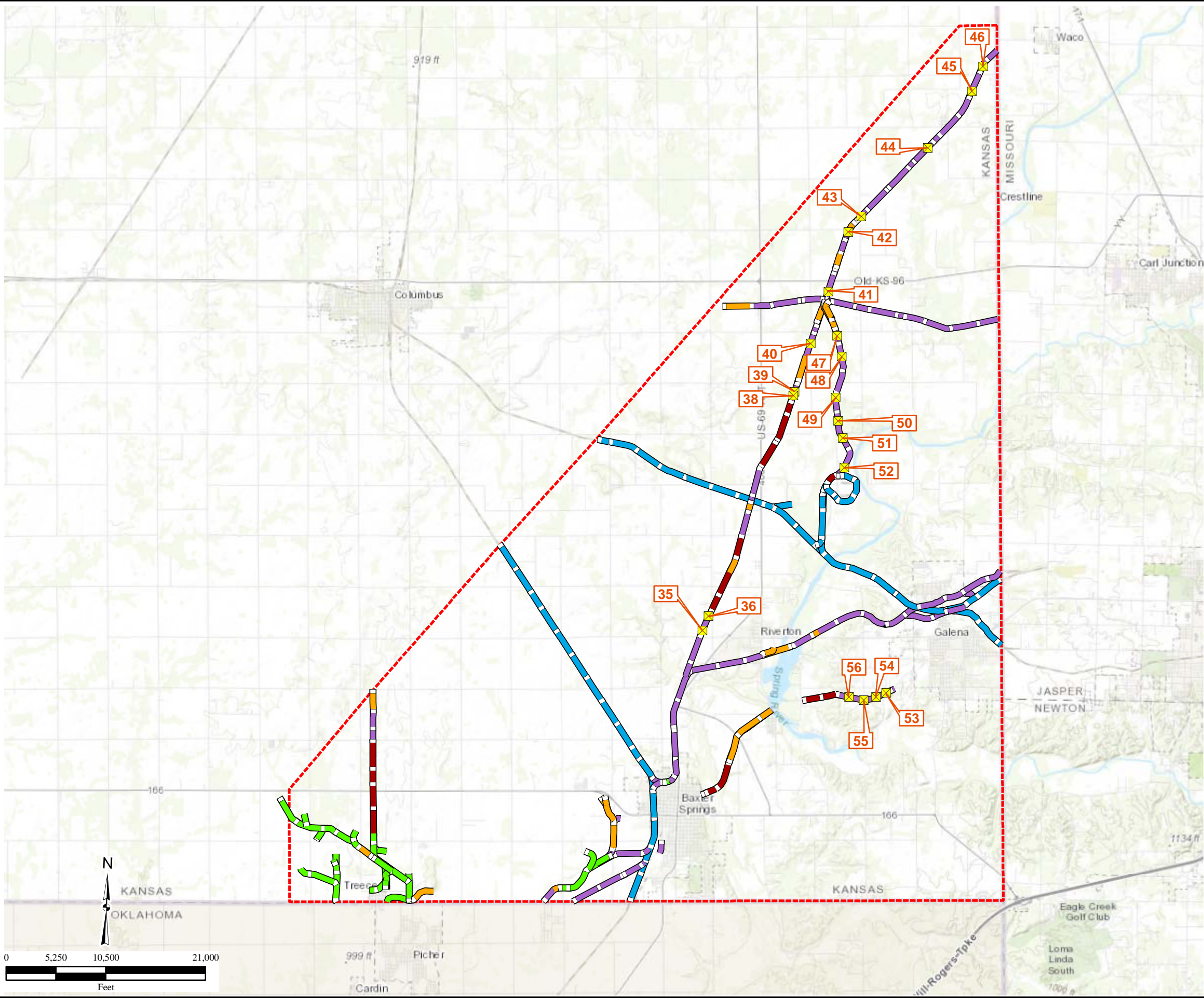
Sincerely,

Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Locations 35 and 36  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
35	7543-1	6/14/2017	0-6 inches	Lead	389
				Zinc	4,684
			6-12 inches	Lead	412
				Zinc	5,952
			12-18 inches	Lead	456
				Zinc	5,901
			18-24 inches	Lead	310
				Zinc	4,256
			24-30 inches	Lead	343
				Zinc	3,468
			30-36 inches	Lead	258
				Zinc	3,675
			36-42 inches	Lead	342
				Zinc	3,919
			42-48 inches	Lead	70
				Zinc	2,242
36	7543-2 7543-3	6/14/2017	0-6 inches	Lead	374
				Zinc	7,574
			6-12 inches	Lead	261
				Zinc	5,738
			12-18 inches	Lead	237
				Zinc	5,844
			18-24 inches	Lead	55
				Zinc	5,645
			24-30 inches	Lead	29
				Zinc	354

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-1  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-1. This sample was collected on 06/14/2017 at the location described as: CCR-SO-35-18-24. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-1 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	378	Milligrams per Kilogram
Zinc	4520	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	91.2	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-2  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-2. This sample was collected on 06/14/2017 at the location described as: CCR-SO-36-12-18. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-2 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	168	Milligrams per Kilogram
Zinc	6440	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	93.2	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-3  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-3. This sample was collected on 06/14/2017 at the location described as: CCR-SO-36-18-24. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-3 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	Approximately 66.0	Milligrams per Kilogram
Zinc	5040	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	93.7	Percent



February 16, 2018

Lena & Robert B McBeth  
515 S 41st St  
Boulder, CO 80305

RE: Analytical results for soil samples collected from former rail line on McBeth Property (Parcel #011-114-20-0-00-00-001.01-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. and Mrs. McBeth:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from test pits excavated on your property (Test Pit Location 40, pits 40A, 40B, and 40C). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from the test pits at a depth up to 12 inches below ground surface (bgs). Zinc did not exceed the proposed cleanup level in the sample submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

Sincerely,



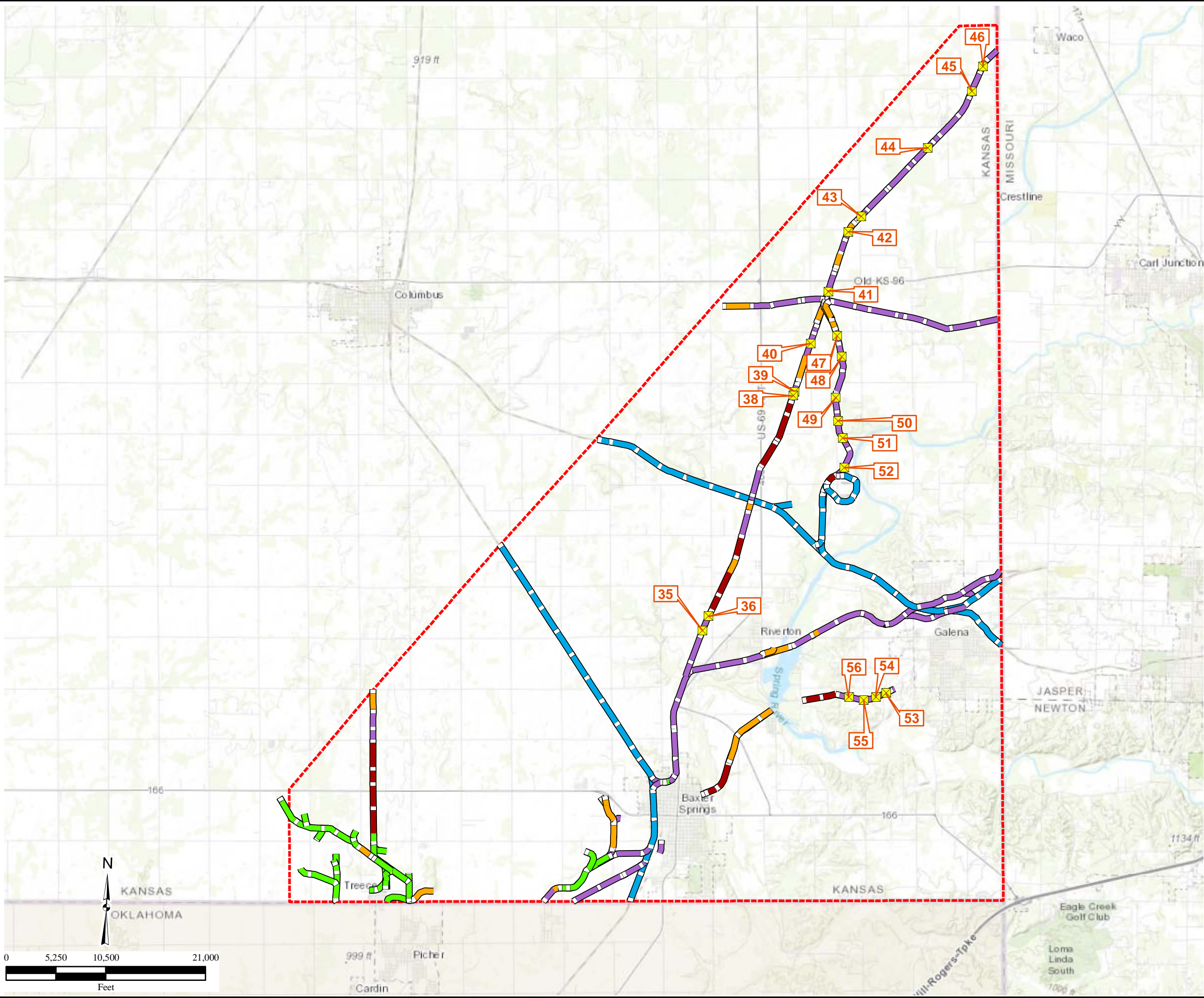
Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Location 40  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7



**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
40	7543-4	6/13/2017	0-6 inches	Lead	279
				Zinc	4,513
			6-12 inches	Lead	349
				Zinc	4,873
			12-18 inches	Lead	20
				Zinc	928
			18-24 inches	Lead	145
				Zinc	1,667

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-4  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-4. This sample was collected on 06/13/2017 at the location described as: CCR-SS-40-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-4 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	274	Milligrams per Kilogram
Zinc	3190	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	96.6	Percent

February 16, 2018

Ozark Regional Land Trust  
PO Box 1512  
Columbia, MO 65205

RE: Analytical results for soil samples collected from former rail line on Ozark Regional Land Trust Property (Parcels #011-115-16-0-00-00-005.00-0, #011-115-16-0-00-00-009.00-0, #011-112-04-0-00-00-005.00-0, #011-112-03-0-00-00-005.00-0, and #011-107-35-0-00-00-008.00-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Ozark Regional Land Trust:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from test pits excavated on your property (Test Pit Locations 41 - 46). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from test pits 42 and 43 at depths up to 12 inches below ground surface (bgs). Zinc did not exceed the cleanup level in the sample submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

Sincerely,



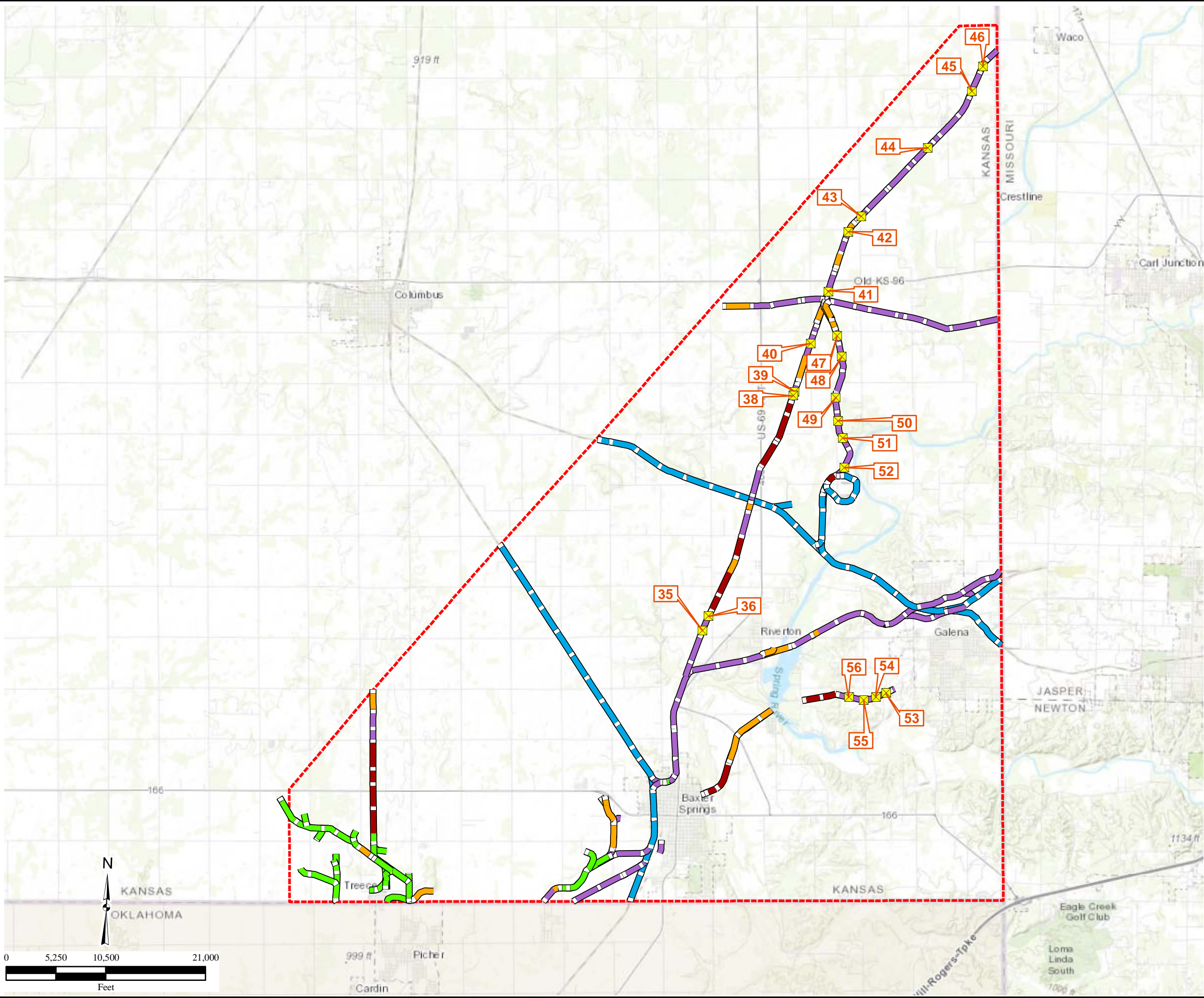
Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Locations 41 - 46  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7



**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.  
  
OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map



Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
41	7543-5	6/13/2017	0-6 inches	Lead	92
				Zinc	1,509
			6-12 inches	Lead	122
				Zinc	2,268
			12-18 inches	Lead	22
				Zinc	329
42	7543-6	6/13/2017	0-6 inches	Lead	20
				Zinc	311
			6-12 inches	Lead	511
				Zinc	2,610
			12-18 inches	Lead	438
				Zinc	5,296
43	7543-7	6/13/2017	0-6 inches	Lead	62
				Zinc	838
			6-12 inches	Lead	40
				Zinc	344
			12-18 inches	Lead	813
				Zinc	5,664
44	7543-8 7543-8-FD	6/13/2017	0-6 inches	Lead	433
				Zinc	4,343
			6-12 inches	Lead	174
				Zinc	1,781
			12-18 inches	Lead	27
				Zinc	607
45		6/13/2017	0-6 inches	Lead	223
				Zinc	2,419
			6-12 inches	Lead	120
				Zinc	1,314
			12-18 inches	Lead	21
				Zinc	207
46		6/13/2017	0-6 inches	Lead	26
				Zinc	170
			6-12 inches	Lead	163
				Zinc	2,479
			12-18 inches	Lead	111
				Zinc	1,046
47		6/13/2017	0-6 inches	Lead	16
				Zinc	116
			6-12 inches	Lead	16
				Zinc	73
			12-18 inches	Lead	48
				Zinc	3,519
48		6/13/2017	0-6 inches	Lead	65
				Zinc	673
			6-12 inches	Lead	25
				Zinc	231
			12-18 inches	Lead	
				Zinc	

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-5  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-5. This sample was collected on 06/13/2017 at the location described as: CCR-SO-41-6-12. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-5 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	91.8	Milligrams per Kilogram
Zinc	1970	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	93.2	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-6  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-6. This sample was collected on 06/13/2017 at the location described as: CCR-SS-42-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-6 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	555	Milligrams per Kilogram
Zinc	3470	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	94.8	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-7

Project ID: EH073708

These are the results from the analysis of solid sample number 7543-7. This sample was collected on 06/13/2017 at the location described as: CCR-SS-43-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-7 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	504	Milligrams per Kilogram
Zinc	3490	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	96.2	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-8

Project ID: EH073708

These are the results from the analysis of solid sample number 7543-8. This sample was collected on 06/13/2017 at the location described as: CCR-SS-44-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-8 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	223	Milligrams per Kilogram
Zinc	1980	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	90.2	Percent



**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-8-FD  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-8-FD(Also known as: Field Duplicate-8). This sample was collected on 06/13/2017 at the location described as: CCR-SS-44-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-8-FD for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	228	Milligrams per Kilogram
Zinc	1890	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	91.8	Percent

February 16, 2018

Garnett Doss  
458 Joplin St  
Asbury, MO 64832

RE: Analytical results for soil samples collected from former rail line on Doss Property (Parcel #011-107-35-0-00-00-008.00-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Ms. Doss:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from the test pit excavated along the rail line that runs through your property (Test Pit Location 46). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1).

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was also not detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from Test Pit 46 at depths up to 18 inches below ground surface (bgs).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

Sincerely,

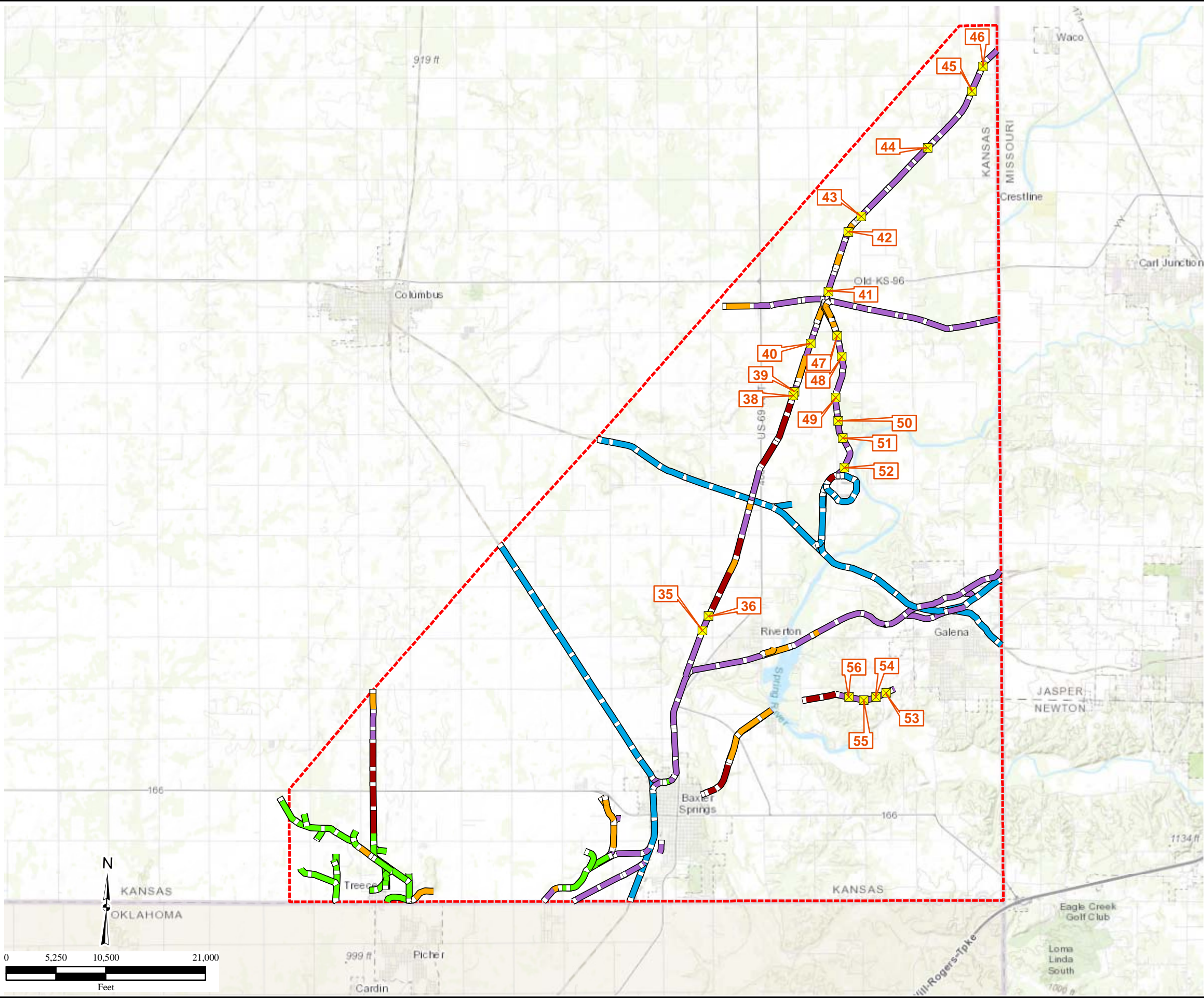


Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Locations 46

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

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- Active Line
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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
46		6/13/2017	0-6 inches	Lead	48
				Zinc	3,519
			6-12 inches	Lead	65
				Zinc	673
			12-18 inches	Lead	25
				Zinc	231

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface





February 16, 2018

Kenneth D Clark, Jr.  
7457 SE Messer Rd  
Galena, KS 66739

RE: Analytical results for soil samples collected from former rail line on Kenneth D Clark, Jr. Revocable Trust Property (Parcel #011-115-21-0-00-00-002.00-0 and 011-118-33-0-00-00-001.00-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. Clark:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from two test pits excavated on your property (Test Pit Locations 47, 48 and 52). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from both test pits 47 and 48 at depths up to 12 inches below ground surface (bgs) and up to 36 inches bgs in test pit 52. Zinc also exceeded the levels in two of the four samples submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

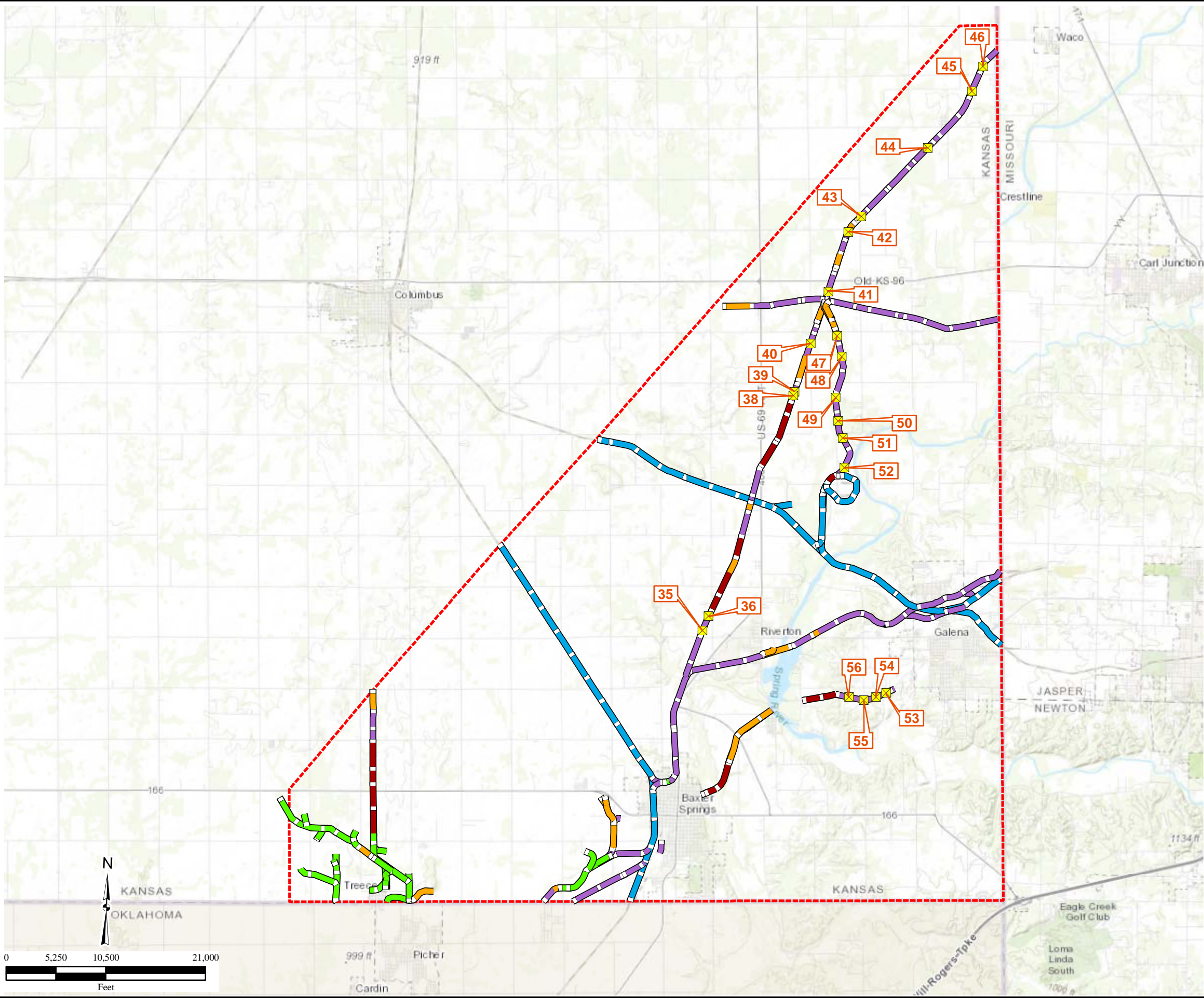
Sincerely,

Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Locations 47, 48, and 52  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map



Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
47		6/13/2017	0-6 inches	Lead	554
				Zinc	10,275
	7543-9		6-12 inches	Lead	791
				Zinc	13,633
			12-18 inches	Lead	23
				Zinc	414
			18-24 inches	Lead	33
				Zinc	331
48		6/13/2017	0-6 inches	Lead	603
				Zinc	4,798
			6-12 inches	Lead	551
				Zinc	10,295
			12-18 inches	Lead	45
				Zinc	530
			18-24 inches	Lead	17
				Zinc	73
52	7543-12 7543-12-FD	6/14/2017	0-6 inches	Lead	66
	Zinc			1,533	
			6-12 inches	Lead	37
				Zinc	739
			12-18 inches	Lead	115
				Zinc	1,815
	7543-13		18-24 inches	Lead	173
				Zinc	3,535
			24-30 inches	Lead	1,022
				Zinc	3,471
			30-36 inches	Lead	195
				Zinc	4,163
			36-42 inches	Lead	17
				Zinc	164

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-9  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-9. This sample was collected on 06/13/2017 at the location described as: CCR-SO-47-6-12. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-9 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	692	Milligrams per Kilogram
Zinc	6060	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	96.7	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-12  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-12. This sample was collected on 06/14/2017 at the location described as: CCR-SS-52-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-12 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	60.7	Milligrams per Kilogram
Zinc	1290	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	93.1	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-12-FD  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-12-FD(Also known as: Field Duplicate-12). This sample was collected on 06/14/2017 at the location described as: CCR-SS-52-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-12-FD for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	269	Milligrams per Kilogram
Zinc	4570	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	94.4	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-13  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-13. This sample was collected on 06/14/2017 at the location described as: CCR-SO-52-18-24. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-13 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	150	Milligrams per Kilogram
Zinc	2990	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	96.0	Percent



February 16, 2018

Willard Edward Watkins  
7750 SE 76th St  
Galena, KS 66739

RE: Analytical results for soil samples collected from former rail line on Watkins Property (Parcel #011-118-28-0-00-00-010.01-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. Watkins:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from two test pits excavated on your property (Test Pit Locations 49 and 50). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1).

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from both test pits at depths up to 30 inches below ground surface (bgs).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

Sincerely,

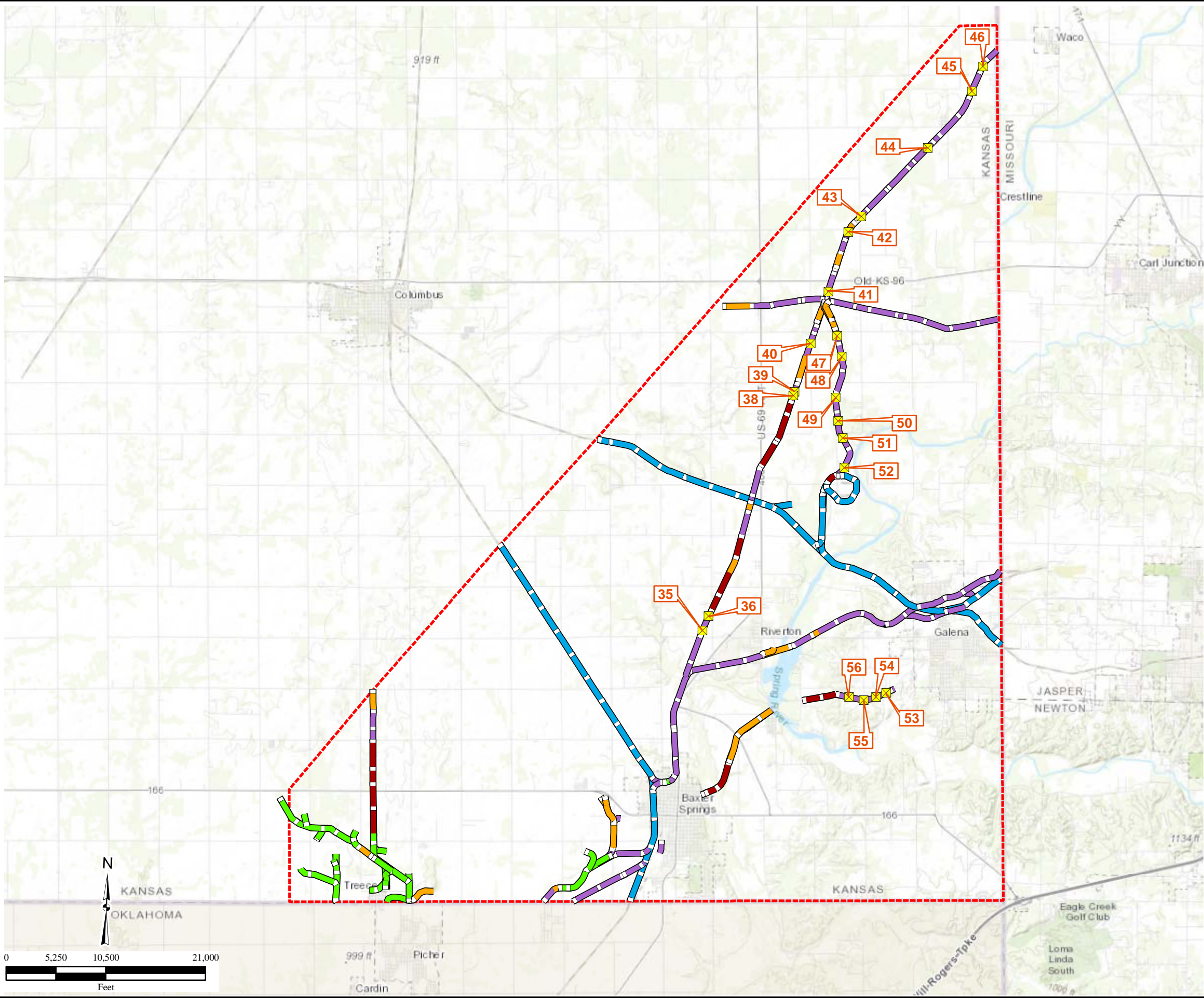


Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Locations 49 & 50

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
49			0-6 inches	Lead	399
				Zinc	4,349
			6-12 inches	Lead	636
				Zinc	4,472
			12-18 inches	Lead	326
				Zinc	7,047
50			18-24 inches	Lead	26
				Zinc	150
			0-6 inches	Lead	147
				Zinc	588
			6-12 inches	Lead	35
				Zinc	195
			12-18 inches	Lead	1,294
				Zinc	2,968
			18-24 inches	Lead	555
				Zinc	10,800
			24-30 inches	Lead	444
				Zinc	10,210
			30-36 inches	Lead	60
				Zinc	754
			36-42 inches	Lead	60
				Zinc	754
			42-48 inches	Lead	60
				Zinc	754

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface





February 16, 2018

Rick & Patricia Jessee  
Crossland Holding Co  
PO Box 45  
Columbus, KS 66725

RE: Analytical results for soil samples collected from former rail line on Rick & Patricia Jessee and Crossland Holding Co Property (Parcel #011-118-33-0-00-00-001.00-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. and Mrs. Jessee and Crossland Holding Company:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from a test pit excavated on your property (Test Pit Location 51, pits 51A, 51B, and 51C). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at concentrations exceeding the cleanup level of 4,000 mg/kg in samples collected from the test pits at depths up to 24 inches below ground surface (bgs). Zinc also exceeded the cleanup levels in the sample submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

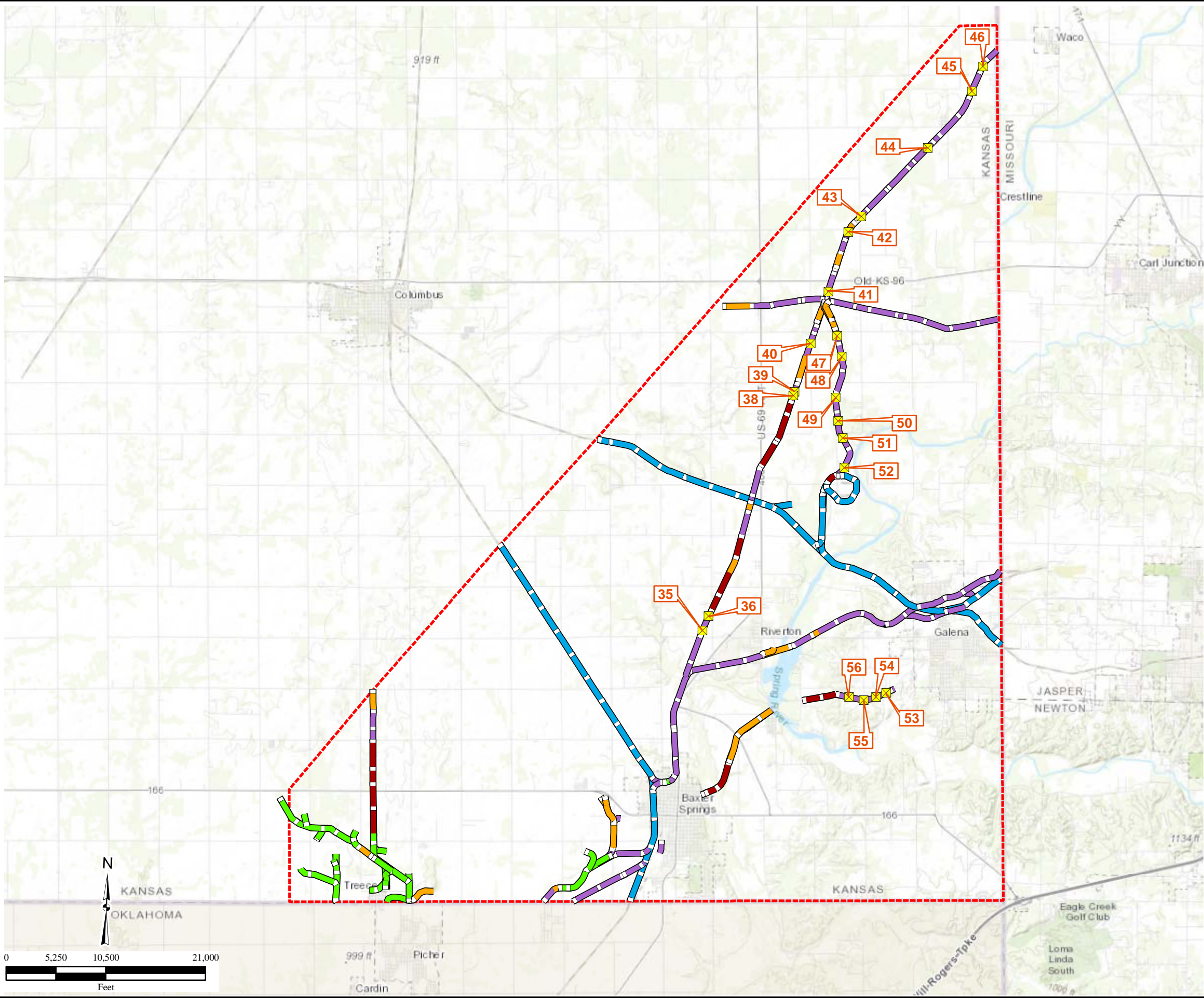
Sincerely,

Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Location 51  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
51		6/14/2017	0-6 inches	Lead	56
				Zinc	735
	6-12 inches		Lead	282	
			Zinc	4,363	
	7543-10		12-18 inches	Lead	649
				Zinc	5,031
			18-24 inches	Lead	378
				Zinc	10,964
			24-30 inches	Lead	35
				Zinc	1,105

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-10  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-10. This sample was collected on 06/14/2017 at the location described as: CCR-SO-51-12-18. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-10 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	708	Milligrams per Kilogram
Zinc	5040	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	96.6	Percent



**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-11  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-11. This sample was collected on 06/14/2017 at the location described as: CCR-SO-51-18-24. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-11 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	416	Milligrams per Kilogram
Zinc	5770	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	94.6	Percent

February 16, 2018

Roger Wayne and Roberta Jean Porter  
2318 W 21st St  
Galena, KS 66739

RE: Analytical results for soil samples collected from former rail line on Porter Property (Parcel #011-208-27-0-00-00-008.00-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. and Mrs. Porter:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from two test pits excavated on your property (Test Pit Locations 53 and 54). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was detected at a concentration exceeding the cleanup level of 4,000 mg/kg in test pit 54 at a depth up to 6 inches. Zinc did not exceed the cleanup levels in all three samples submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

Sincerely,

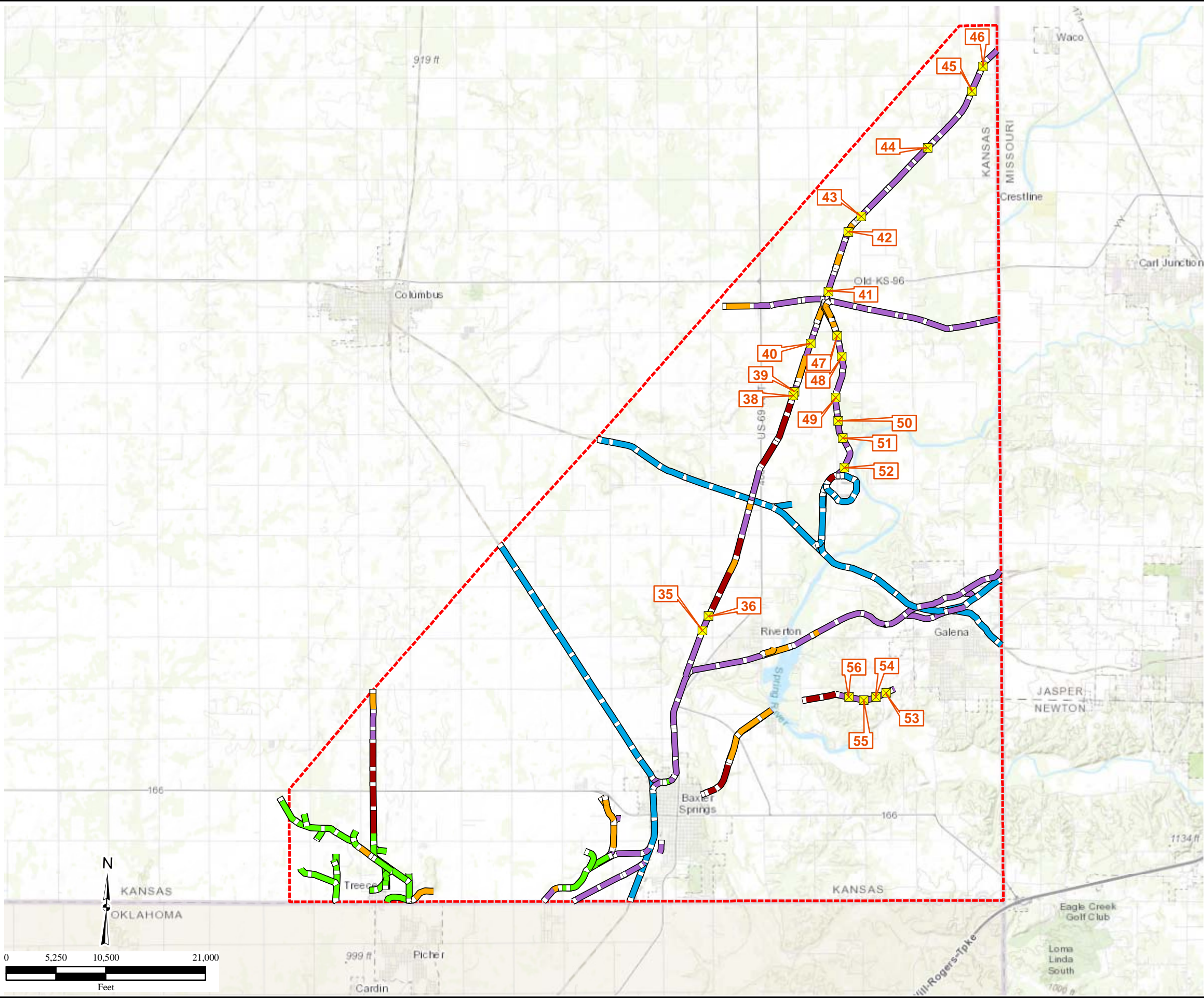


Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Locations 53 and 54  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
53	7543-14	6/14/2017	0-6 inches	Lead	1,333
				Zinc	1,149
	7543-15		6-12 inches	Lead	973
				Zinc	1,089
			12-18 inches	Lead	474
				Zinc	964
			18-24 inches	Lead	30
				Zinc	527
54		6/14/2017	0-6 inches	Lead	1,153
				Zinc	4,099
			6-12 inches	Lead	1,693
				Zinc	1,918
	7543-16		12-18 inches	Lead	1,589
				Zinc	1,824
			18-24 inches	Lead	619
				Zinc	757
			24-30 inches	Lead	238
				Zinc	988

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-14  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-14. This sample was collected on 06/14/2017 at the location described as: CCR-SS-53-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-14 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	1870	Milligrams per Kilogram
Zinc	3130	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	97.0	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-15  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-15. This sample was collected on 06/14/2017 at the location described as: CCR-SO-53-6-12. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-15 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	1210	Milligrams per Kilogram
Zinc	1890	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	94.0	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-16  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-16. This sample was collected on 06/14/2017 at the location described as: CCR-SO-54-12-18. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-16 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	2070	Milligrams per Kilogram
Zinc	2810	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	91.9	Percent





February 16, 2018

William E Gandy Jr  
7730 SE 85th St  
Galena, KS 66739

RE: Analytical results for soil samples collected from former rail line on Gandy Property (Parcel #011-208-28-0-00-00-015.01-0) in support of the Cherokee County OU8 Railroads Site Investigation in Cherokee County, Kansas.

Dear Mr. Gandy:

HydroGeoLogic, Inc. (HGL), on behalf of the U.S. Environmental Protection Agency (EPA), is providing the analytical results of the soil samples collected from two test pits excavated on your property (Test Pit Locations 55 and 56). This information is forwarded to you in accordance with the provisions of Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. These samples were collected during field activities conducted in June 2017 in support of the Remedial Design conducted at the Cherokee County OU8 Railroads Site in Cherokee County, Kansas. Samples were analyzed in the field using x-ray fluorescence (XRF), a scanning instrument that provides real-time results for select metals screened in the field at each location (see Figure 1). In addition, one soil sample per test pit was submitted to the Region 7 EPA laboratory for analysis. The analytical results are included in Attachment A.

Soil results were compared to the proposed cleanup levels determined as part of the Risk Assessment conducted during the Remedial Investigation. As indicated in Table 1, lead was not detected at concentrations exceeding the cleanup level of 1,770 milligrams per kilogram (mg/kg) and zinc was not detected the cleanup level of 4,000 mg/kg in samples collected from both test pits. Lead and zinc did not exceed the cleanup levels in either sample submitted to the Region 7 EPA laboratory for analysis (Attachment A).

Please contact me at 913-317-8860 or Elizabeth Hagenmaier of the EPA at 913-551-7939 if you have questions or concerns regarding this data package.

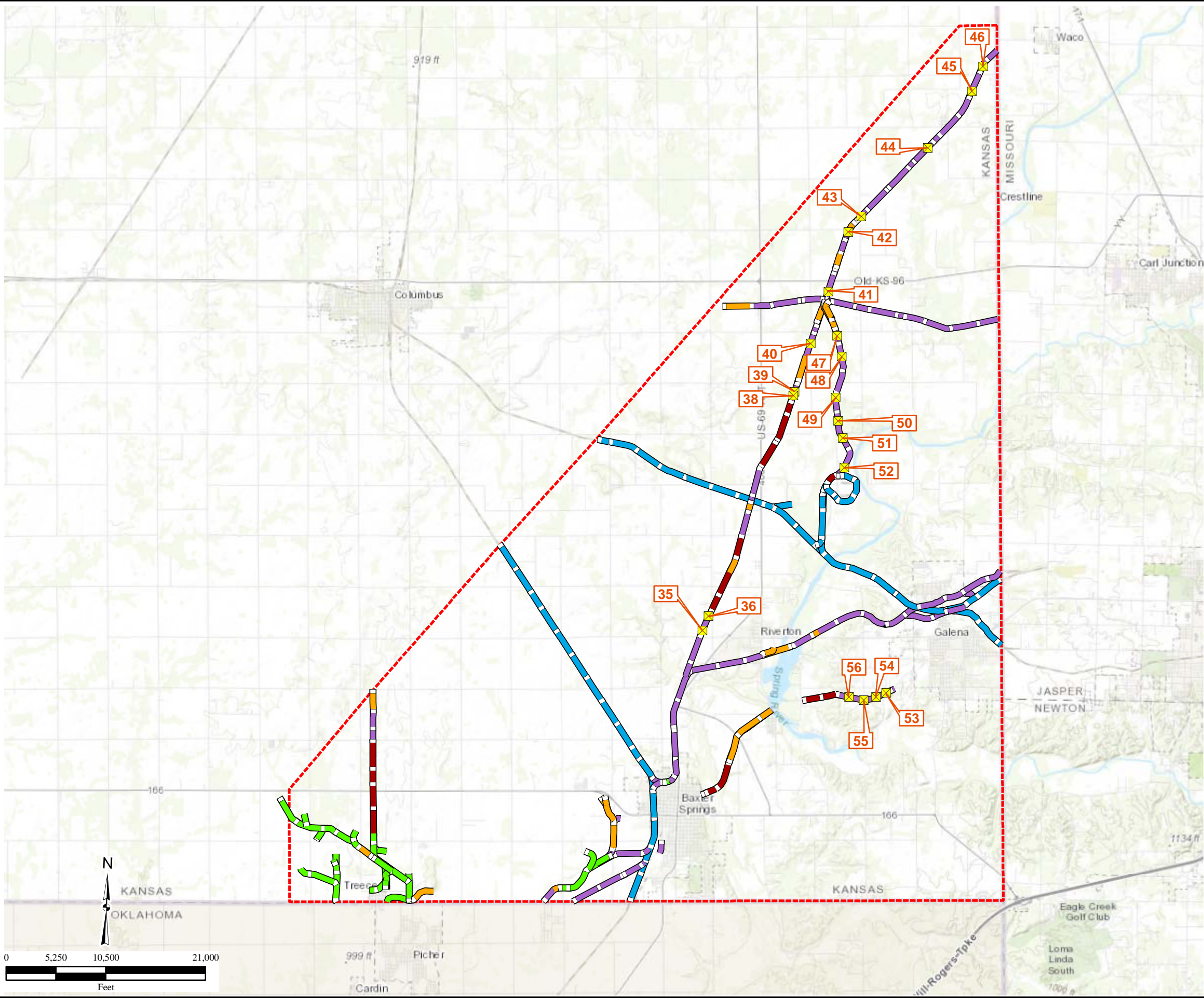
Sincerely,

Andrea Fletcher  
HGL Task Order Manager

Enclosures: Figure 1: Former Rail Line Classifications and Sample Locations  
Table 1: XRF Screening Results for Location 55 and 56  
Attachment A: Analytical Data Package

cc: E. Hagenmaier, EPA Region 7

**Figure 1**  
**Former Rail Line Classifications and**  
**Sample Locations**



**Legend**

- RD Sample Location
- RD Sample Identification
- Site Boundary

**Rail Classification**

- Active Line
- Former Lines Within OU8
- No Longer Present or Remediated
- Addressed Under Other OU
- No Access

Notes:  
Rail lines addressed under other OUs were remediated to cleanup levels established for those OUs.

OU=operable unit  
RD=remedial design  
RI=remedial investigation  
SMP=sampling and analysis plan

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(4-01)RR\_Class\_Sample\_Locs.mxd  
2/7/2018 JG  
Source: HGL,  
ArcGIS Online USA Topo Map

Table 1  
XRF Screening Results  
Cherokee County OU8 Railroads Site

Test Pit Location	Sample ID Number	Sample Date	Sample Depth (bgs)	Reporting Analytes	Results
55	7543-17	6/14/2017	0-6 inches	Lead	1,368
				Zinc	430
			6-12 inches	Lead	231
				Zinc	782
			12-18 inches	Lead	48
				Zinc	401
56	7543-18	6/14/2017	0-6 inches	Lead	1,249
				Zinc	551
			6-12 inches	Lead	199
				Zinc	1,004
			12-18 inches	Lead	64
				Zinc	538

Notes:

Shaded results indicate value is above the cleanup level specified in the Record of Decision.

Results are all reported in milligrams per kilogram

Sample collection ended when native soil was encountered.

bgs = below ground surface

**Attachment A**  
**Laboratory Data Package**

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-17  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-17. This sample was collected on 06/14/2017 at the location described as: CCR-SS-55-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-17 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	996	Milligrams per Kilogram
Zinc	1080	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	97.7	Percent

**United States Environmental Protection Agency  
Region 7  
11201 Renner Blvd  
Lenexa, KS 66219**

11/16/2017

**Results of Sample Analysis**

Sample: 7543-18  
Project ID: EH073708

These are the results from the analysis of solid sample number 7543-18. This sample was collected on 06/14/2017 at the location described as: CCR-SS-56-0-6. If you have any questions about these results, contact Elizabeth Hagenmaier at the above address or by calling 913-551-7939. Correspondence should refer to sample number 7543-18 for project: EH073708 - Cherokee County - Railroads sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Metals in Soil by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)</u></b>		
Lead	1680	Milligrams per Kilogram
Zinc	2610	Milligrams per Kilogram
<b><u>Percent Solid</u></b>		
Solids, percent	97.5	Percent